

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1-34. (Canceled)

35. (New) An adaptive sensor comprising:

a plurality of detectors; and

wherein:

each detector comprises an adjustable filter; and

each adjustable filter is adjustable independent of an adjustment of another filter of a detector of the plurality of detectors.

36. (New) The sensor of claim 35, wherein the plurality of detectors is situated in a sealed package.

37. (New) The sensor of claim 36, wherein each detector further comprises an actuator connected to the adjustable filter.

38. (New) The sensor of claim 37, wherein the actuator is an electrostatic actuator.

39. (New) The sensor of claim 37, wherein each detector is an infrared light detector.

40. (New) The sensor of claim 39, wherein the adjustable filter is a variable bandpass filter for infrared light.

41. (New) The sensor of claim 36, wherein the adjustable filter is adjustable for selecting a wavelength of a plurality of wavelengths of light.

42. (New) The sensor of claim 39, wherein the adjustable filter is for selecting a bandpass mode for infrared light.

43. (New) The sensor of claim 39, wherein each detector of the plurality of detectors is a bolometer.

44. (New) The sensor of claim 41, wherein each adjustable filter is a Fabry-Perot filter.

45. (New) The sensor of claim 35, wherein the plurality of detectors is situated on a first wafer.

46. (New) The sensor of claim 45, wherein the second wafer is a topcap situated on the first wafer thereby enclosing the plurality of detectors.

47. (New) The sensor of claim 46, wherein the first and second wafers form an integrated vacuum package.

48. (New) The sensor of claim 47, wherein the topcap comprises a light transmissive window.

49. (New) A means for detecting comprising:

a means for detecting light; and

wherein:

the means for detecting light comprises a plurality of
detectors;

each detector of the plurality of detectors is
comprises a variable wavelength filter; and

the variable wavelength filter is adjustable
independent of a variable filter of another
detector of the plurality of detectors.

50. (New) The means of claim 49, wherein the each detector
comprises an actuator connected to the variable filter

51. (New) The means of claim 50, wherein the actuator is a
capacitive actuator.

52. (New) The means of claim 49, wherein the variable filter is adjustable to a narrow bandpass at a wavelength of light.

53. (New) The means of claim 52, wherein the wavelength of light is selectable from a range of wavelengths between about one micron and thirteen microns.

54. (New) The means of claim 49, wherein the means for detecting light is situated in a sealed enclosure.

55. (New) A method for detecting comprising:

providing a plurality of detectors;

wherein:

each detector of the plurality of detectors comprises
an adjustable light filter; and

the filter is adjustable to a desired wavelength
independently of at least another filter of a
detector of the plurality of detectors.

56. (New) The method of claim 55, further comprising
situating the plurality of detectors in a sealed enclosure.

57. (New) The method of claim 56, wherein the filter is
electrostatically adjusted.

58. (New) The method of claim 55, wherein the filter is
attached to at least one leg spring for adjustment relative
to an electrostatic force.

59. (New) The method of claim 55, wherein the filter may
be selectively adjusted to a wavelength of an infrared
spectrum.

60. (New) A sensor comprising:

an array of detectors; and

wherein:

each detector of the array of detectors comprises a
tunable etalon; and

the etalon is tunable to desired band of light for a
detector of the array of detectors independently
of another tunable etalon of a detector of the
array of detectors.

61. (New) The sensor of claim 60, wherein the array of
detectors is enclosed a hermetically sealed package.

62. (New) The sensor of claim 60, wherein the etalon
comprises an actuator to tune the etalon.

63. (New) The sensor of claim 62, wherein the actuator
operates according to an electrostatic force.

64. (New) The sensor of claim 60, wherein the etalon is
situated on a set of leg springs for movement for tuning.

65. (New) The sensor of claim 60, wherein the etalon is tunable to a wavelength of a plurality of wavelengths of light.

66. (New) The sensor of claim 65, wherein:

the detector is a bolometer; and

the etalon is a Fabry-Perot etalon.

67. (New) The sensor of claim 61, wherein the hermetically sealed package comprises:

a topcap; and

a base; and

wherein the topcap is bonded to the base.

68. (New) The sensor of claim 67, wherein the topcap and base are bonded on a die-to-die basis.